

CLAIMS

1. A bottom seal (9) at the lower end of a step
5 screen (1) provided with a grating (3) and adapted to
convey solid particles and objects positioned in flow-
ing water (2), the grating comprising alternately fixed
and movable lamellar rods (4, 5) with intermediate gaps
10 (6) to allow the water to pass through the grating and
with steps (8) at their longitudinal edges (7) upstream,
the movable lamellar rods (5) being movable in a closed
motion path (2) in their plane with an upwards component
(C) which is greater than the height of the steps (D),
for step by step conveyance of the solid particles and
15 the objects from the water and along the fixed lamellar
rods (4) to an outlet, the bottom seal (9) extending sub-
stantially across the entire width of the grating to seal
the ducts (10) that arise between the fixed lamellar rods
at their lowermost step (8) as the movable lamellar rods
20 move upwards between the fixed lamellar rods,

c h a r a c t e r i s e d i n t h a t

the bottom seal (9) comprises at least one elongate
bottom cover (11), which at its longitudinal edge (12)
upstream is connected to the step screen (1) and at its
25 longitudinal edge (16) downstream on the one hand is
guided on guides (17) on the lowermost steps (8) of the
movable lamellar rods (5) in order to follow the motion
thereof and, on the other hand, in this motion is pivot-
able up and down (E) close to and past the edges (7)
30 upstream on the lowermost steps (8) of the fixed lamellar
rods (4).

2. A bottom seal as claimed in claim 1,
in which the bottom cover (11) to be pivotal is at
least partly made of a flexible material.

35 3. A bottom seal as claimed in claim 1,
in which the bottom cover (11) is pivotally connect-
ed to the step screen (1) via a bottom step (13), which

extends substantially across the entire width of the grating (3) upstream of the bottom cover.

4. A bottom seal as claimed in claim 3,
in which the bottom cover (11) is pivotally connect-
5 ed to the bottom step (13) by means of at least one hinge (15).

5. A bottom seal as claimed in any one of the pre-
ceding claims,

in which the guides (17) on the lowermost steps (8)
10 of the movable lamellar rods (5) project from the same upstream towards the bottom cover (11) and guide the bot-
tom cover from below.

6. A bottom seal as claimed in claim 5,
in which the longitudinal edge (16) of the bottom
15 cover (11) downstream abuts slidingly against the guides (17) of the movable lamellar rods (5).

7. A bottom seal as claimed in claim 5 or 6,
in which the guides (17) of the movable lamellar
rods (5) are substantially rectilinear.

20 8. A bottom seal as claimed in any one of the pre-
ceding claims,

in which the edges (7) upstream on the lowermost
steps (8) of the fixed lamellar rods (4) are curved with
a radius (F) which is only slightly greater than the
25 pivoting radius (G) of the bottom cover (11) and which
has substantially the same centre (7) as the latter to
form a small, but substantially tight motion gap (20)
between the edges of the fixed lamellar rods upstream
and the longitudinal edge (16) of the bottom cover down-
30 stream.

9. A bottom seal as claimed in any one of the pre-
ceding claims,

in which the bottom cover (11) to ensure its guid-
ing on the guides (17) of the movable lamellar rods (5)
35 during the motion thereof is yieldably loaded towards
the guides.

10. A bottom seal as claimed in claim 9,
in which the yieldable load is provided by at least
one spring means, preferably at least one tension spring
(19) fixed between the bottom step (13) and the bottom
5 cover (11).